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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,910	03/18/1999	DIRK VAN DIJK	VR2-002	8639

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 03/25/2003

33

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/171,910

Applicant(s)

VAN DIJK ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-70 and 73-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-70 and 73-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

WITHDRAWN REJECTIONS

1. The 35 U.S.C. §112-2nd paragraph rejections of claims 58, 62, 67 and 69 of record in paper #31, pages 2-3, paragraph #5 have been withdrawn.

REJECTIONS REPEATED

2. The 35 U.S.C. §112-2nd paragraph rejection of claim 68 is repeated for reasons previously of record in paper #31, pages 2-3, paragraph #5.

3. The 35 U.S.C. §102 rejection of claims 56, 57, 60 and 70 as anticipated by Jex (5,273,819) is repeated for reasons previously of record in paper #31, page 4, paragraph #6.

4. The 35 U.S.C. §103 rejection of claims 56-70 and 73-75 over Cogswell (4,559,262) is repeated for reasons previously of record in paper #31, pages 4-6, paragraph #7.

NEW REJECTIONS

5. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 103

6. Claims 76-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cogswell et al. (4,559,262).

Cogswell discloses a fiber reinforced composition comprising a thermoplastic matrix with embedded long and short fibers. Suitable fiber material is glass, carbon, jute and high modulus synthetic polymers (col. 3, lines 3-5). The thermoplastic polymer maybe polypropylene or polyethylene (col. 3, lines 51-68). The long fibers are 3-100 mm in length and are present in at least 50% by weight (col. 7, lines 49-63). Furthermore, that least 50% of the fibers by volume are aligned in the direction of draw. The short fibers have a length of up to 0.25 mm and are blended into the mix (col. 9, lines 48-65).

Cogswell, further discloses that randomly oriented fibers gain exceptionally high strength measured in all directions (col. 10, lines 20-28). Although, Cogswell is silent about orientation of the short fibers, it would be obvious to one of ordinary skill in the art to randomly orient the fibers since it would help the article to gain strength in all directions. Further evidenced by pat. no. 5,273,819.

Cogswell discloses the claimed invention except that the particles are fir, spruce, birch, or poplar instead of jute. These are taken to be equivalent materials since they are all woody fibers as seen in by the Dictionary of Fiber and Textile Technology. Therefore, because these fibers are art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute jute for any of fir, spruce, birch, or poplar.

The exact ratio between the length in the first particle direction and the transverse dimension of the wood material particles is deemed to be a cause effective variable. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the ratio through routine experimentation in the absence of a

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showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Furthermore, Cogswell further disclose that the lengths of the aligned fibers, the thickness of the ape, the shaped mandrel would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end result (col. 7, line 52 to col. 8, line 37). Therefore, one of ordinary skill in the art would have recognized that the exact ratio between the length in the first particle direction and the transverse dimension of the wood material particle is deemed to be a cause effective variable as suggested by Cogswell. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the value of the cause effective variable such as the ratio through routine experimentation depending on the end results as suggested by Cogswell in the absence of showing of criticality in the claimed combined thickness.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's argument filed in paper #32 regarding the 35 U.S.C. §112-2nd paragraph rejections of claims 58, 62, 67 and 69 of record have been carefully considered but are moot since the rejections have been withdrawn.

8. Applicant's argument filed in paper #32 regarding the 35 U.S.C. §112-2nd paragraph rejections of claim 68 of record have been carefully considered but are deemed unpersuasive.

Applicant argues that claim 68 refers to jute, which is a bark fiber material and the term "wood" refers to the hard substance of a tree below the bark. Applicant directed the Examiner's attention to attached pages from Webster's Dictionary, how these pages were not found to

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accompany the response. However, the Examiner's Merriam-Webster's Collegiate Dictionary, 10th edition defines wood as the fibrous substance consisting basically of xylem that makes up the greater part of the stems, branches, and roots, of trees, or shrubs beneath the bark and is found to a limited extent in herbaceous plants. Also, there is both hard and soft woods. Since wood is made of fibers, any fibrous material or fibers obtained from wood would be considered wood material. Furthermore, the Examiner has already pointed out that the materials of claim 68 are bast fibers, which are woody fibers, see The Dictionary of Fiber and Textile Technology. The claim is indefinite because these fibers are woody. Although the terms of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. *In re Cohn*, 438 F.2d 989, 169 USPQ 95 (CCPA 1971); *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970). MPEP 2173.03.

9. Applicant's argument filed in paper #32 regarding the 35 U.S.C. §102 rejection of claims 56, 57, 60 and 70 as anticipated by Jex (5,273,819) of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Jax does not disclose, teach or suggest a product similar to the product according to amended claim 56, in which the large particles are predominantly oriented such that their first particle direction is in the longitudinal direction of the product and the small particles are randomly oriented. Applicant states that the long fibers of Jax tend to be oriented perpendicular to the extrusion axis, which extrusion axis can be considered to be parallel to the longitudinal axis of the extruded product. The Examiner disagrees and considers the extrusion axis to be perpendicular to the longitudinal axis and therefore the long fibers are oriented in the

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longitudinal axis. The term "longitudinal direction" while not indefinite is relative to the direction in which the final product is viewed. Depending on the position of the composite product of Jax, when viewed, the long fibers either have a longitudinal or lateral direction. If the long fibers are ever oriented in the lateral direction one only has to rotate the final product 90° to have the long fibers oriented in a longitudinal direction. Therefore Jax anticipated that the long fibers will be orientated in a longitudinal direction.

Furthermore, the extrusion axis is in reference to the method of making the composite. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113.

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10. Applicant's argument filed in paper #32 regarding the 35 U.S.C. §103 rejection of claims 56-70 and 73-75 over Cogswell (4,559,262) of record have been carefully considered but are deemed unpersuasive.

Applicant argues that it would not be obvious to modify the Cogswell reference in the manner suggested by the Examiner because there is no teaching or suggestion in the references of record of how the Cogswell product should be modified or of portions of the Cogswell reference should be selected and modified. In response to Applicant's argument that there is no suggestion to modify the references, the Examiner recognizes that references cannot be arbitrarily modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modification of the references. However, there is no requirement that a motivation to make the modification be expressly articulated. The test for modifying references is what the disclosure taken as a whole would suggest to one of ordinary skill in the art. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In this case, Cogswell recognizes and disclose that the lengths of the aligned fibers, the thickness of the ape, the shaped mandrel would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end result (col. 7, line 52 to col. 8, line 37). Therefore, one of ordinary skill in the art would have recognized that the exact ratio between the length in the first particle direction and the transverse dimension of the wood material particle is deemed to be a cause effective variable as suggested by Cogswell. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the value of the cause effective variable such as the

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ratio through routine experimentation depending on the end results as suggested by Cogswell in the absence of showing of criticality in the claimed combined thickness.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

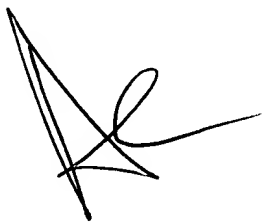
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac
3/24/03




HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

3/24/03